

Patent claims

1. Roller arrangement for embossing web-shaped materials, in particular, web-shaped paper and tissue materials, with
 - a punch, on which a first embossing pattern encompassing a plurality of spaced-apart elevations is arranged, and
 - a matrix on which a second embossing pattern encompassing a plurality of spaced-apart elevations is arranged;

Whereby the elevations on the first embossing pattern are lowered into free spaces on the second embossing pattern,

characterized by the fact that the elevations (16, 36) on the embossing pattern of the punch (10, 30) or the matrix are positioned in rows (12, 14; 32, 34) that are spaced apart in the circumferential direction while at least one cleaning roller (20, 40) is provided which is fitted with cleaning elements (26, 26', 28; 46, 46', 48) in the circumferential direction which run between the rows (12, 14 and/or 32, 34) of elevations on the embossing pattern of the punch or the matrix.

2. Roller arrangement in accordance with claim 1, characterized by the cleaning elements (26, 26'; 46, 46') which are spaced apart in the circumferential direction of the cleaning roller (20; 40).
3. Roller arrangement in accordance with claim 1, characterized by the cleaning elements (26, 28; 46, 48) which are radially offset in the axial direction of the cleaning roller (20; 40).
4. Roller arrangement in accordance with claim 1, characterized by the cleaning elements being knife-like cleaning studs.
5. Roller arrangement in accordance with claim 1, characterized by elevations in the embossing pattern which are arranged in a checker board pattern.